NOTES AND NEWS.

THE PIGMENT of the negro skin, also found in white races to a much less extent, is believed (Abel and Davis in *Science* **2**: 110) to hold some chemical relation to chlorophyll.

A KEY TO THE WOODY PLANTS of Mower county, Minnesota, has been published by Mr. K. C. Davis. It is intended to be used in the winter time, and embraces fifty-two species of ligneous plants.

THE BOTANICAL LIBRARY of Mr. C. G. Lloyd of Cincinnati numbers 3,000 bound volumes and 1,000 pamphlets, and contains many choice and valuable works. It receives a large number of additions yearly.

TOXICODENDRIC ACID, which was studied by Maisch in 1865, and since that time generally accepted as the poisonous principle of Rhus Toxicodendron or poison ivy, is now said by Pfaff (*Science* **2**: 118) to be identical with acetic acid, and that the poisonous substance is an oil, which he calls toxicodendrol.

MR. EDWARD C. JEFFREY, of the University of Toronto, finds that Erythronium Americanum shows polyembryony which is exactly homologous with that common among gymnosperms. The fertilized egg produces a mass of cells which produces on its free surface two, three, or even four embryos. Of these only one persists in the ripened seed. Cf. *Annals of Botany* **9**: 537. D 1895.

A CORRECTION.—In the GAZETTE for May, 1894, under the title of "Notes from Vermont," I stated that *Aster tardiflorus* L. had been collected in Smuggler's Notch. This was determined for me by competent persons, but the determination was incorrect. The plant in question is a form of *A. Novi-Belgii* L. The *Myriophyllum scabratum* Mx. proved to be *M. Farwellii* Morong.—A. J. GROUT, *Columbia College, N. Y.*

COLLECTIONS FROM the western coast of Greenland are reported upon in the *Proceedings of the Philadelphia Academy of Sciences* by Mr. Wm. E. Meehan (April, 1892) and again by Mr. Theo. Holm (Feb. 1895). As this insular region possesses much interest to the geographical botanist it is worthy of note that the plants on which these reports are based are deposited in the Academy of Sciences in Philadelphia and a partial duplicate set in the national herbarium at Washington, and that the second paper supplements the first by correcting a number of determinations.

AN ADDITIONAL donation of $10,000 for the endowment of the New York Botanic Garden has recently been received from Mrs. Esther Hermann. This garden, if it continues to receive the attention from wealthy residents of New York that it has so far received, is likely to be within a few years the foremost botanic garden in America, and one of the largest in the world. The work of constructing roads and erecting buildings will begin in the spring. About 250 species of

plants in addition to those now growing on the grounds have been placed in a temporary nursery, and a gift of $5,000 worth of plants from Mr. James A. Pitcher is available at any time.

RAMIE, THE FIBER derived from Boehmeria, is the material of the ancients, which has been called linen and cotton by translators, according to Mr. C. O. Boring, who writes in the *Dry Goods Bulletin* (18: 12) for Jan. 1, 1896. The fiber is an extraordinarily pure cellulose exceeding cotton, and by improved methods of preparation becomes a rival to silk in luster and susceptibility to color. The fiber is long and very strong, and is capable of being woven into cloth of almost any texture. The native B. cylindrica has a good quality of fiber, but the species usually cultivated is B. nivea. The latter is grown in Louisiana, Texas and California, and as a manufactured article reaches this country from China under the name of China grass cloth.

THE PHARMACEUTISCHE RUNDSCHAU has changed its name to the *Pharmaceutical Review*, and is hereafter to be published chiefly in English, though not to the exclusion of German articles. The veteran editor, Dr. Fr. Hoffmann, retains his connection with the *Review*, but has associated with himself as the active editor Dr. Edward Kremers, Director of the School of Pharmacy of the University of Wisconsin. The direct cooperation of seven of the leading pharmacists and chemists has been secured and their names appear upon the title page. The place of publication also changes from New York to Milwaukee, where the Pharm. Review Publishing Co. has charge of all business matters. The *Review* has not only maintained a high scientific standard but has in the past kept itself absolutely free from commercial influence, a policy which will no doubt be consistently adhered to in the future. Botanists will find much in the pages of the review of most direct interest and we cordially commend it to our readers.

TRABUT[1] describes two modes in which *Aristida ciliaris* Desf. is protected against creeping insects. The plant inhabits the desert of Sahara and shows there the development of a ring of long, divaricate hairs at the nodes, which prevents creeping insects, ants, etc., from reaching the inflorescence. The same species has lately also been found by Ain Sepra in South Oran, but represents here a singular variety, being destitute of the hairy ring, but showing a secretion of a viscid substance, which covers a part of the internodes near the node. The other part of the internode is very smooth as in the typical plant. It is curious if this plant should, really, have been able to protect itself against the ants, while other species as *A. pungens* from Sahara and *A. oligantha* from North America are said to be eagerly sought by the ants, which should gather their grains. The author says that *A. oligantha* is called "blé de fourmis" in Texas, a fact that is not recorded in our agrostological works.—T. H.

PARASITIC FUNGI, as an index to the inner nature of plant hybrids, have been tested by Dr. Jakob Eriksson at the experiment station in Stockholm, Sweden, in a particularly interesting manner (*Botaniska*

[1] L. Trabut: *Aristida ciliaris* Desf. et les fourmis. Bull. de la soc. bot. de France 41: 272. 1894.

Notiser **1895**: 251–253). Plants grown from seed received from Germany were attacked by rust, which proved to be *Puccinia dispersa* Eriks. & Henn., a species having two well marked physiological races, one maintaining itself on rye and the other on wheat. The plants on which it was now growing were supposed hybrids between rye and wheat, the crosses having been made by Dr. Rimpau of Schlaustedt, the previous season, and while looking in general much like wheat, had the elongated heads of rye. The uredospores from the rust on these supposed hybrids were sown on young rye plants (25 infections) and on similar wheat plants (26 infections). In fifteen days all the infected spots on the wheat plants showed characteristic pustules, while the rye plants remained entirely free, although the observations were continued for thirty-five days. The conclusion is inevitable that the presence of this particular race of rust showed that the supposed hybrid partook of the physiological nature of wheat and not of rye, whatever might be true of the morphological characters.

THE EXPERIMENT STATION bulletins containing botanical matter, which have come to hand since the last notice, are as follows: Some experiments with fungicides on peach foliage, by S. M. Bain (Tenn. vol. 8, no. 3); Effect of liming upon the development of potato tubers, by H. J. Wheeler, J. D. Towar and G. M. Tucker (R. I. no. 33), reaches the conclusion that lime upon sour soils increases the yield but also promotes the scab; Upon the effect of barnyard manure and various compounds of sodium, calcium and nitrogen upon the development of the potato scab, by H. J. Wheeler and G. M. Tucker (R. I. no. 33), a very full and important statement of the action of external conditions upon the growth of scab; Grape culture, by H. N. Starnes (Ga. no. 28) contains a brief account of fungous diseases and their treatment, black rot and root rot being considered far the worst; Notions about the spraying of trees, by L. H. Bailey (Cornell no. 101), enforces some fundamental ideas that must be kept in mind to obtain success in the use of fungicides; Treatment of currants and cherries to prevent spot diseases, by L. H. Pammel and G. W. Carver (Iowa no. 30), shows the efficiency of Bordeaux mixture; Squirrel-tail grass, Hordeum jubatum (Iowa no. 30), gives the results of much research, with a number of original illustrations; Studies of maple sap, by F. W. Morse (N. H. no. 32) is an interesting report on the flow of sap and the parts of the trunk from which it comes; Care of fruit trees with some reflections upon weeds, by L. H. Bailey (Cornell no. 102), gives some good advice not always kept in mind; The wild onion, Allium vineale, by R. L. Watts (Tenn. vol. 8, no. 2), an account of its distribution, habits and the methods of extermination.

THE ACADEMY OF SCIENCES of Iowa, Ohio and Indiana presented the following botanical subjects in their programs at the holiday sessions.

Iowa: Notes on the flora of western Iowa, by L. H. Pammel; Notes on grasses between Jefferson, Iowa, and the Rocky mountains in Colorado, by L. H. Pammel and F. Lamson-Scribner; Notes on chromogenic bacteria, by L. H. Pammel and R. Combs; Inoculation experiments with Gymnosporangium macropus, by F. C. Stewart and G. W.

Carver; Forest distribution in Iowa and its significance, and Notes on the problem of nomenclature as it appears in the Myxomycetes, by T. H. McBride; Some anatomical studies of the leaves of Sporobolus and Panicum, by Emma Pammel and Emma Sirrine; Perfect flowers in Salix, and Notes on the Iowa flora, by B. Shimek; A comparative study of the spores of North American ferns, by C. B. Weaver.

Ohio: List of white mildews in Cuyahoga, Erie and Medina counties, List of mosses and hepaticæ new to or rare in Ohio, Does Artemisia biennis live over winter, and Additions to the flora of Ohio and to those of certain counties, by Edo Claassen; A contribution to the flora of Fairfield county, and Formalin as a preservative of vegetable tissues, by E. M. Wilcox; Two new German handbooks of plant diseases, Some hitherto unlisted Ohio fungi, by Aug. D. Selby; Additions to the bibliography of Ohio botany, Distribution of the mistletoe in Ohio, Germination of seeds treated with fungicides, and The early Ohio botanists, by W. A. Kellerman; An analytical key to Ohio parasitic fungi, A freak of Cornus florida, and The parasitic fungi of Ohio, by F. L. Stevens; Flora of Erie county and the islands, by E. L. Moseley; The botanic garden and Institute at Leipzig, by G. M. Holferty.

Indiana: Botanical literature of the state library, and Microscopic slides of vegetable material for use in determinative work, by John S. Wright; Embryology of Hydrastis Canadensis, and Some determinative factors underlying plant variation, by Geo. W. Martin; The circulation of protoplasm in the manubrium of Chara fragilis, by D. W. Dennis; Flora of Turkey lake, by O. H. Meincke; Some beneficial results from the use of fungicides as a preventive of corn smut, by Wm. Stuart; Ratio of alcohol to yeast in fermentation, and Infection by bread, by Katherine E. Golden; Distribution of Orchidaceæ in Indiana, by Alice M. Cunningham; A new station for Pleodorina, by Severance Burrage; Report upon certain collections presented to State Biological Survey, Certain plants as an index of soil character, and Noteworthy Indiana phanerogams, by Stanley Coulter; Forms of Xanthium Canadense and X. strumarium, and An interchangeable clinostat of new design, by J. C. Arthur; Some notes on wood shrinkage, by M. J. Golden.